

## DOCUMENT RESUME

ED 289 400

HE 020 860

TITLE College-Bound Seniors Report, 1985-86.  
INSTITUTION Connecticut State Board of Education, Hartford.  
PUB DATE 87  
NOTE 29p.  
AVAILABLE FROM Connecticut State Board of Education, 61 Woodland Street, Hartford, CT 06105.  
PUB TYPE Statistical Data (110) -- Reports - Descriptive (141)  
  
EDRS PRICE MF01/PC02 Plus Postage.  
DESCRIPTORS Achievement Tests; \*Aptitude Tests; \*College Bound Students; Comparative Analysis; Education Majors; Higher Education; High Schools; \*High School Seniors; High School Students; Majors (Students); Mathematics Tests; Minority Groups; Racial Differences; \*Scores; Sex Differences; Statistical Data; \*Student Characteristics; Verbal Tests; Writing Skills  
IDENTIFIERS \*Connecticut; \*Scholastic Aptitude Test

## ABSTRACT

The twelfth annual report on the Scholastic Aptitude Test (SAT) scores of Connecticut's college-bound seniors analyzes their characteristics, high school records, and college plans. This report is based upon the most recent responses of 28,302 1985-86 seniors who participated in the College Board's Admission Testing Program at any time during high school. Among the results highlighted are the following: (1) the verbal average of 440 as nine points above the national average and equal to last year's state average; (2) males averaged 444 of the verbal and females 437; (3) the average math score of 474 was one point below last year's state average and one point below the national average; (4) the math average for males was 499 and for females, 451; and (5) the gap between black and white students on the verbal and math tests is wide but has narrowed since 1975-76. A series of figures and tables provides results and comparative analyses by test, ethnic/minority group, sex, and by intended area of study. (KM)

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# College-Bound Seniors Report 1985-86

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# **College-Bound Seniors Report 1985-86**

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## PREFACE

This is the twelfth annual report prepared by the Office of Research and Evaluation to analyze the Scholastic Aptitude Test (SAT) scores of Connecticut's college-bound seniors. This is the sixth report that, in addition to test scores, comprehensively presents these students' characteristics, their high school records and their college plans.

This report is based upon the most recent responses of 1985-86 public and nonpublic school seniors who participated in the College Board's Admissions Testing Program at any time during high school. Thus, students who participated in the program in May of their junior year and in October of their senior year have only the October results reported, while students who participated only in May of their junior year have these scores included. Connecticut students are those attending school in Connecticut or, if a school code is not reported on the questionnaire, those with a Connecticut mailing address.

Not every student in the Admissions Testing Program (ATP) takes an SAT. In 1985-86 there were 29,658 students registered for the ATP, but only 28,302 took an SAT. Some could have registered for only the achievement tests, or registered and then decided not to take the SAT. A few seniors could have registered for the first time in March of their senior year for the May administration.

The Admissions Testing Program consists of the verbal and mathematical sections of the Scholastic Aptitude Test, Test of Standard Written English (TSWE), 14 optional achievement tests, and the Student Descriptive Questionnaire.

The Scholastic Aptitude Test, probably the most familiar component of the Admissions Testing Program, consists of a two-and-one-half hour, multiple-choice test of verbal and mathematical reasoning. It is intended to supplement high school grades in the college admissions process. The tests, whose scores range from 200-800 points, are constructed so that scores will be comparable from form to form, administration to administration, and year to year.

The Test of Standard Written English is a 30-minute multiple-choice examination of ability to recognize standard written English. It was developed in 1974-75 to help colleges place students in freshman English courses. Scores are placed upon a 20 to 80 point scale, but because the test is to be used as a diagnostic instrument, the highest reported score is 60+.

A student may take up to three one-hour multiple-choice achievement tests per session. These are designed to measure knowledge and its application in English comprehension, literature, American history and social studies, European history and world culture, mathematics (levels 1 and 2), French, German, Hebrew, Latin, Spanish, biology, chemistry, and physics.

The Student Descriptive Questionnaire (SDQ) contains questions on a student's background, school record, extracurricular activities, and college plans. It gives colleges a broader picture of a student than do test scores alone. The SDQ was revised significantly in 1985-86. Students from the class of 1986 who registered for the SAT last year filled out the old form. Because this was the transition year from the old to new form, the College Board was unable to provide as much information as in past years. The demographic data presented in this report were derived from the Department's analysis of a Connecticut data tape provided by the College Board. Since only Connecticut data were available, many of the national comparisons available in the past were not available this year. In the future more detailed national and state data are expected to be available.

The students described in this report are called college-bound seniors. They are students whose intent to attend college is indicated by their taking the SAT. Last year the College Board reported that 28,302 Connecticut seniors in the class of 1985 took the SAT. Information from the Connecticut State Department of Education's Graduate Follow-Up Report indicates that 28,636 or 68.2 percent of the 1985 graduates of the local public, vocational-technical and nonpublic schools were pursuing post-high school study, and 25,544 of these graduates were attending two- or four-year colleges.

The primary purpose of this report is to highlight the information on college-bound seniors presented to the State Department of Education by the College Board. The Department of Education's Office of Research and Evaluation has a file of statewide data from 1971-72 to date and welcomes inquiries.

## HIGHLIGHTS

The data from the Admissions Testing Program of the College Board (1) shows how Connecticut's college-bound seniors' academic performance and future aspirations compare with their peers nationwide, (2) provides a picture of students considering education as a career, and (3) provides information for five indicators of success of The Comprehensive Plan for Elementary, Secondary, Vocational, Career and Adult Education. The information used for Connecticut's indicators can be identified by the darkened circle preceding the highlight.

- o 28,302 students, 67.4 percent of all twelfth graders in Connecticut, took a Scholastic Aptitude test (see table 1). The College Board reported that Connecticut had the highest participation rate in the nation.
- o The percentage of minority students among college-bound seniors has risen from 7.1 percent to 12.6 percent in the past ten years (see table 2).

- The Connecticut SAT verbal average of 440 was nine points above the 1985-86 national average and equal to last year's state average. The state average is ten points above the 1980 81 low, one point above the level of ten years ago and 23 points below the level of 15 years ago (see table 3 and Figure 1).
- On the SAT verbal, Connecticut males averaged 444 and females 437. The difference between the male and female average was seven points, typical for the past ten years. The male-female difference is smaller in Connecticut than the nation (see Table 3).
- The Connecticut average SAT mathematical score of 474 was one point below last year's state average and one point below the current national average. The state average is ten points above the 1981-82 low, but 16 points below the average of 15 years ago (see Table 4 and Figure 2).
- The mean SAT mathematical score of Connecticut males was 499, and that of females was 451, a difference of 48 points. Nationally, the difference was 50 points (see Table 4).
- The percentage of Connecticut students scoring above 600 on the verbal (9.0%) equalled and the percentage on the mathematical (17.9%) SAT surpassed their respective ten-year highs. The verbal percentage exceeds the national average and the mathematical percentage equals it (see Table 5).
- The gap between Connecticut's black and white students on the verbal and mathematical SAT is wide but has narrowed since 1975-76. The 97-point deficit on the verbal SAT in 1985-86 is an 18-point improvement over ten years ago. The mathematical difference has improved 24 points in the past ten years and now is 113 points. The Hispanic averages were 93 points lower on the verbal and 90 points lower on the mathematical SAT than the white averages. As the number of Hispanics has increased dramatically in the past ten years and the definition of Hispanic changed to specifically include Latin, Central and South Americans in 1985-86, the ten-year trend of essentially no change relative to the white averages is difficult to interpret (see Figures 3 and 4).
- The Connecticut average of 42.8 (on a scale of 20-80) on the Test of Standard Written English (TSWE) was 0.6 points below last year and 0.2 points above the national average (see Table 6).
- Connecticut female students averaged 43.6 on the TSWE, 1.5 points higher than the males. In 1974-75 the female average was 2.4 points higher than the males (see table 6).



- o About one in three Connecticut students who take the SAI take the achievement tests; nationwide, the figure is almost one in five. The verbal SAI of this subgroup of Connecticut students was two points above, and the mathematical SAI, four points below the comparable national averages. Compared to last year, this year's averages decreased in English Composition, American History, Mathematics level 1, Biology, and Chemistry, but increased slightly in Mathematics level 2 (see table 1).
- o The percentage of female students intending to secure a professional degree surpassed the male percentage for the first time ever (see table 8).
- o Over the past ten years, the most dramatic change in the intended area of college study has been a decline in the biological sciences and an increase in business, commerce and communications. In the past year there was a significant decline in interest in the physical sciences, especially computer science, and a renewed interest in education (see table 9).
- The percent of Connecticut female students intending to study education increased from 6.4 to 8.0 percent in the past year, but is still well below the percentage of ten years ago (12.1%). The percentage of males intending to study education increased by 0.4 points to 2.0 percent in the past year, but is below the 4.2 percent level of ten years ago (see table 9).
- The verbal and mathematical SAI scores of seniors intending to study education have increased a combined total of 40 points in the past four years, but remain well below the state's verbal and mathematical averages (see table 10 and figure 5).

## STUDENT CHARACTERISTICS

The Connecticut test scores from the Admissions Testing Program (ATP) are more meaningful when compared with prior years' data and national data. This underscores the importance of knowing how the characteristics of the Connecticut students participating in the ATP change from year to year and how they compare to students nationally.

There were 42,022 twelfth graders in the local public, state vocational-technical schools and in the nonpublic schools in 1985-86. This was over 1,500 fewer than the prior year, almost 9,800 below the 1977-78 peak, and the lowest number in the past ten years. The percentage of seniors attending public school has declined every year for the past ten and now stands at 82.6 percent (see Table 1).

Table 1  
Characteristics of 12th Grade  
Students in Connecticut

Academic Year	Number of 12th Graders	Percent in Public Schools	Number Taking SAT Exams	Percent of 12th Graders Taking SAT
1985-86	42,022	82.6	28,302	67.4
1984-85	43,595	82.9	28,866	66.2
1983-84	45,839	83.4	29,669	64.7
1982-83	48,327	83.9	30,659	63.4
1981-82	49,923	84.8	31,962	64.0
1980-81	50,031	84.9	32,196	64.4
1979-80	49,405	85.1	31,734	64.2
1978-79	51,671	85.5	32,285	62.5
1977-78	51,863	85.8	31,567	0.9
1976-77	51,848	85.9	31,834	61.4
1975-76	51,570	86.5	32,967	63.9

In 1985-86, 67.4 percent of Connecticut's twelfth graders took the SAT, the highest percentage of seniors taking the SAT ever. The College Board has reported that Connecticut has the highest participation rate in the country. Nationwide, about one-third of high school graduates take the SAT. The College Board alerts those interpreting these scores that generally the greater the percentage of students taking the test, the lower the average score. Thus, with its high participation rate, the Connecticut scores might be predicted to fall below the national average. Yet in many cases, Connecticut scores are actually higher than the national average and most are higher than would be expected.

Table 2 shows the characteristics of the Connecticut seniors who took the SAT for the years 1975-76 through 1985-86. The 28,302 taking the SAT was the smallest number in the past ten years, about 600 fewer than last year and almost 4,900 below the 1974-75 peak. This decline is attributable to declining enrollment and would have been greater had the percentage taking the SAT not increased. Females were 51.8 percent of the college-bound seniors in 1985-86. In the past ten years this percentage has ranged from a low of 50.9 percent (1975-76) to a high of 52.5 percent (1981-82). This current state percentage is 0.1 percentage point below the percentage of females nationally taking the SAT. The percentage of Connecticut college-bound seniors who attended public schools was not available in 1985-86. Last year 74.8 percent of Connecticut's and 80.6 percent of the nation's college-bound seniors reported attending public schools.

**Table 2**  
**Characteristics of Connecticut Students**  
**Taking the Scholastic Aptitude Test**

Academic Year	Number Taking SAT	Percent Female	Estimated Percent Public	Estimated Percent Minority	Estimated Median Family Income
1985-86	28,302	51.8	N/A	12.6	\$37,375
1984-85	28,866	51.7	74.8	10.1	\$35,300
1983-84	29,669	51.9	74.9	10.0	\$33,000
1982-83	30,659	52.2	75.3	9.4	\$31,300
1981-82	31,962	52.5	76.8	9.3	\$28,700
1980-81	32,196	52.1	77.1	9.0	\$25,200
1979-80	31,734	52.0	78.6	8.8	\$22,900
1978-79	32,285	51.9	78.3	8.4	\$21,400
1977-78	31,567	52.2	78.4	8.1	\$19,700
1976-77	31,834	52.0	78.7	7.5	\$17,900
1975-76	32,967	50.9	79.7	7.1	\$17,000

In the past ten years, the percentage of minority college-bound students in Connecticut has risen from 7.1 percent to 12.6 percent. (In the fall of 1985, 15.1 percent of Connecticut's public school twelfth graders were minorities.) The number of students identified as minorities (81.4% of this year's students responded to this question) was 3,037 in 1985-86, a 28 percent increase over last year and a 92.5 percent increase over ten years ago. The increase can be attributed in part to an almost doubling (from 324 to 642) in the number of Hispanics identified. The number of minorities taking the SAT (adjusted for nonrespondents) is estimated to be about 3,560. No nationwide data on minority participation were available in 1985-86; last year 20.0 percent of the nation's college-bound students were minorities. The median family income of \$37,375 reported by Connecticut college-bound seniors in 1985-86 was \$2,075 (5.9%) above last year's state average. No national data on median family income were provided in 1985-86. Last year the Connecticut average was \$3,100 above the national median family income.

## TEST SCORES

Table 3 and Figure 1 contain the average SAT verbal scores for male and female students in Connecticut and in the nation for the past ten years. The 1985-86 Connecticut average of 440 equalled last year's average and was nine points above the current national average. The nine point difference in scores between Connecticut and national students has been exceeded only once in the past ten years. This was the first year in the last five that the Connecticut average did not increase.

The downward trend of the verbal SAT has been reversed. The national average now is seven points above the 1979-80 and 1980-81 lows. The Connecticut average is ten points above the 1980-81 low, and one point above its level of ten years ago. The national average is currently equal to its 1975-76 level.

While these results are very positive in terms of the ten-year perspective, they fall short of the levels of the 1960s and early 1970s. Fifteen years ago the Connecticut verbal average was 463 and the national average was 455. Connecticut state data are not available prior to 1968-69 when the verbal average was 477. The national verbal average was 475 for the 1955 to 1959 and 1960 to 1964 periods and 468 for the 1965 to 1969 period.

Table 3  
Scholastic Aptitude Test  
Verbal Scores

Academic Year	Males		Females		Total	
	CT	Nation	CT	Nation	CT	Nation
1985-86	444	437	437	426	440	431
1984-85	444	437	436	425	440	431
1983-84	443	433	430	420	436	426
1982-83	437	430	429	420	433	425
1981-82	437	431	428	421	432	426
1980-81	436	430	424	418	430	424
1979-80	434	428	428	420	431	424
1978-79	437	431	434	423	435	427
1977-78	441	433	435	425	438	429
1976-77	437	431	436	427	437	429
1975-76	440	433	436	430	439	431

Males outscored females on the verbal SAT both in Connecticut and in the nation. In 1985-86, the male average was seven points higher than the female average in Connecticut and eleven higher in the nation. The difference between the male and female verbal averages was one point less than last year's level, as the female average increased one point while the male average remained the same. The seven point gap is approximately the average difference that has existed over the past ten years. The gap that exists in state is smaller than the 11-point gap that existed nationwide in 1985-86.

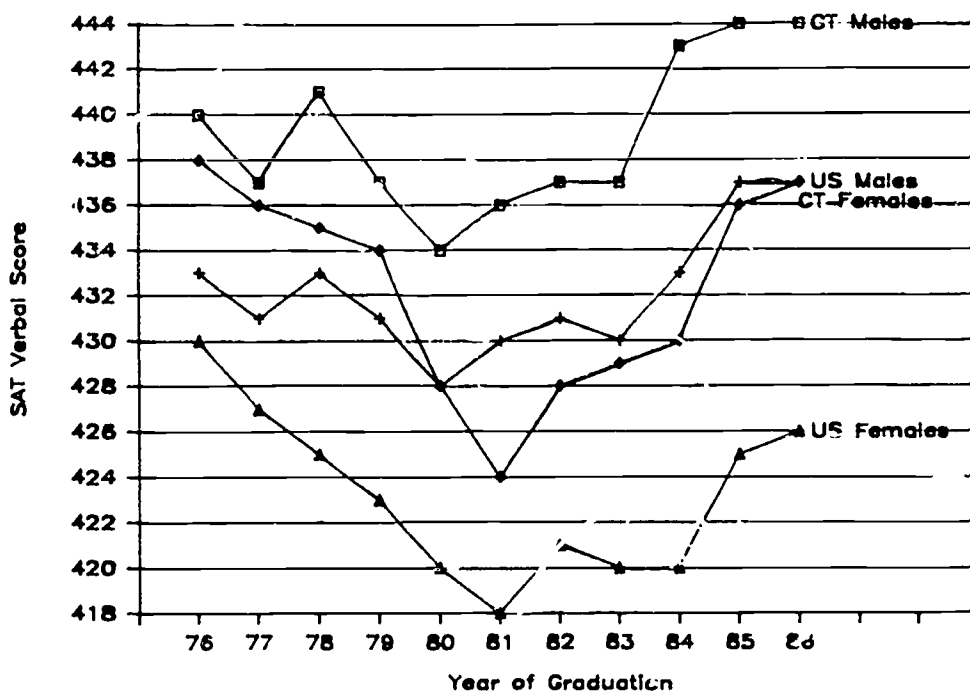


Figure 1  
Scholastic Aptitude Test Verbal Scores

Table 4 and Figure 2 present the SAT mathematical scores for male and female students in Connecticut and in the nation from 1975-76 to 1985-86. The Connecticut average of 474 in 1985-86 was one point below both the prior year's state average and this year's national average. In the past ten years, the state's average has varied from one point above to three points below the national average.

There was a 48-point gap between the mathematical averages of Connecticut male and female students in 1985-86. In the past ten years, this differential has ranged from 41 to 50 points. The male average of 499 was the same as last year and 12 points above the 1979-80 Connecticut low. The female average of 451 was down three points from last year, but was still 12 points above the 1980-81 low.

Table 4  
Scholastic Aptitude Test  
Mathematical Scores

Academic Year	Males		Females		Total	
	CT	Nation	CT	Nation	CT	Nation
1985-86	499	501	451	451	474	475
1984-85	499	499	454	452	475	475
1983-84	490	495	447	449	468	471
1982-83	489	493	443	445	465	468
1981-82	490	493	440	443	464	467
1980-81	488	492	439	443	463	466
1979-80	487	491	446	443	466	466
1978-79	488	493	443	443	465	467
1977-78	493	494	447	444	469	468
1976-77	494	497	445	445	468	470
1975-76	498	497	449	446	473	472

The long-term decline in the mathematical SAT average also appears to have been reversed. The Connecticut and national averages have increased in four of the past five years. Connecticut is 11 points and the nation is 9 points above their respective 1980-81 lows.

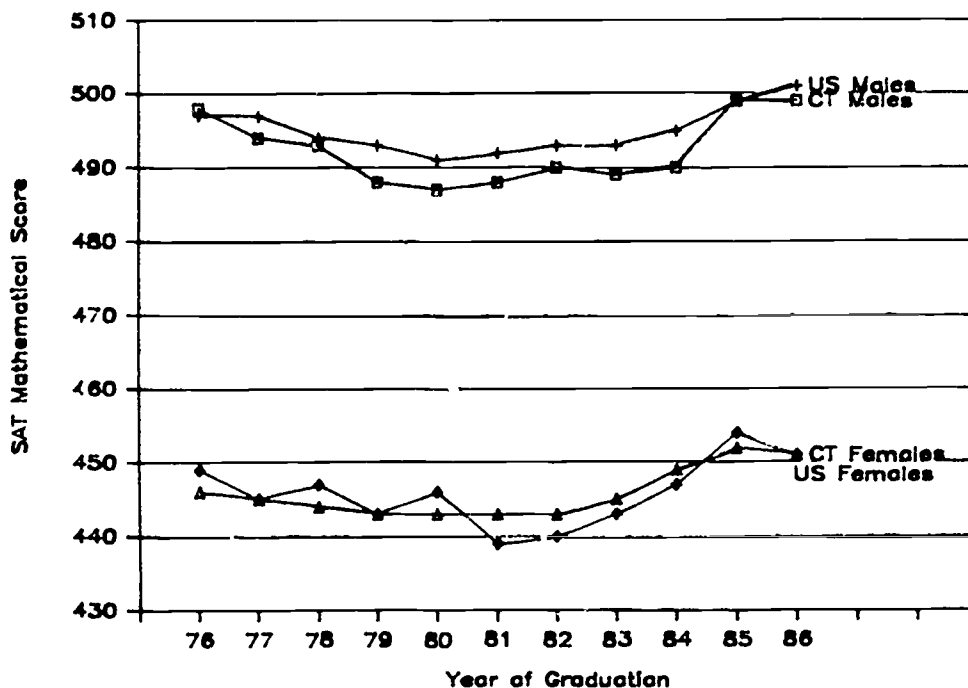


Figure 2  
Scholastic Aptitude Test  
Mathematical Scores

Although both the state and national averages are at or near ten year highs, they are below earlier levels. Fifteen years ago (1970 /1) the Connecticut average was 490 and the national average was 488. The national average was 497 over the 1955 to 1959 period, 498 over the 1960 to 1964 period, and 494 over the 1965 to 1969 period.

Table 5 presents the percentage of students in Connecticut and the nation who scored 600 and above on the verbal or mathematical SAT over the past ten years. On the verbal SAT, 2,556 Connecticut students (9.0% of SAT takers) scored 600 and above in 1985-86. This was 1.1 percentage points above the national average and equal to last year's state level. It equals the ten-year high set in 1975-76 and last year, but is exceeded by the 11.0 percent reported 15 years ago. On the mathematical SAT, 5,076 Connecticut students (17.9% of the SAT takers) scored 600 and above in 1985-86. This was 0.4 percentage points above last year and higher than the level of 15 years ago. The Connecticut percentage above 600 on the mathematical SAT equalled the national percentage. It is interesting to note that the percentage of the college-bound population with high mathematical ability exceeds the level of 15 years ago, while the average level of mathematical ability has declined.

**Table 5**  
**Percent of Students Scoring 600 and Above**  
**on the Scholastic Aptitude Test**

Academic Year	Verbal		Mathematical	
	CT	Nation	CT	Nation
1985-86	9.0%	7.9%	17.9%	17.9%
1984-85	9.0%	7.9%	17.5%	17.1%
1983-84	8.6%	7.3%	16.2%	16.7%
1982-83	7.8%	6.9%	15.2%	15.9%
1981-82	7.8%	7.1%	14.6%	15.3%
1980-81	7.3%	7.0%	13.4%	14.4%
1979-80	7.9%	7.2%	14.8%	15.1%
1978-79	8.5%	7.7%	14.3%	15.0%
1977-78	8.6%	7.9%	15.0%	15.8%
1976-77	8.5%	8.0%	15.0%	16.1%
1975-76	9.0%	8.2%	15.9%	16.3%

The College Board has begun to report average SAT scores by ethnic group. Figures 3 and 4 present for the years 1975-76 through 1985-86 the Connecticut average verbal and mathematical scores, respectively, for blacks, Hispanics, Orientals and whites. The Hispanic category includes Puerto Rican, Mexican American and other Hispanics (Latin American, Central American and South American). The "other Hispanic" category was introduced in 1985-86. Puerto Ricans are the predominant Hispanic group in the state, accounting for 60 percent of the college-bound Hispanics in 1985-86.

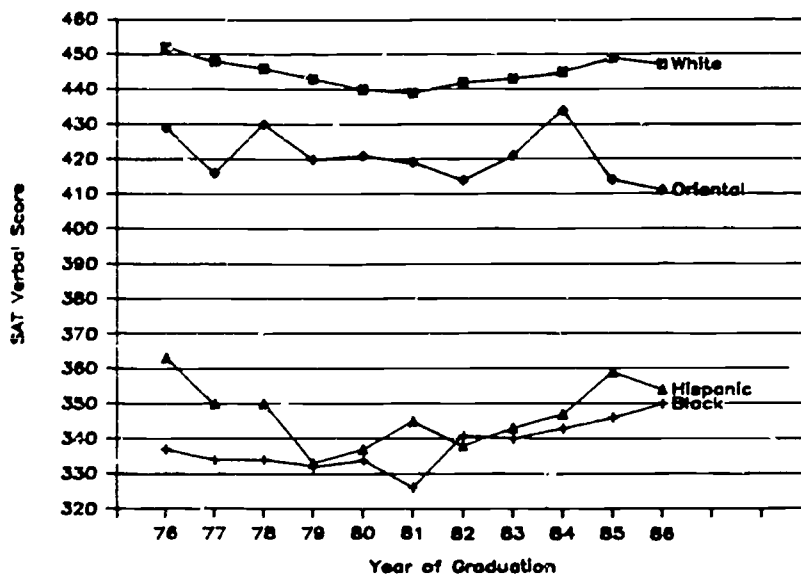


Figure 3  
Scholastic Aptitude Test  
Verbal Scores By Ethnic Group

The average verbal score for blacks increased for the third consecutive year and now stands at 350. This is 24 points above the 1980-81 low and 13 points above the 1975-76 level. Their current mathematical average of 368 is 18 points above the 1975-76 low, and one point from the high set last year. The differences between the black and white verbal and mathematical averages have narrowed since they were first recorded in 1975-76. The verbal average for black students in 1985-86 was 97 points below the white average, an improvement from the 115 point difference that existed in 1975-76. This is the first time the gap has been less than 100 points. The

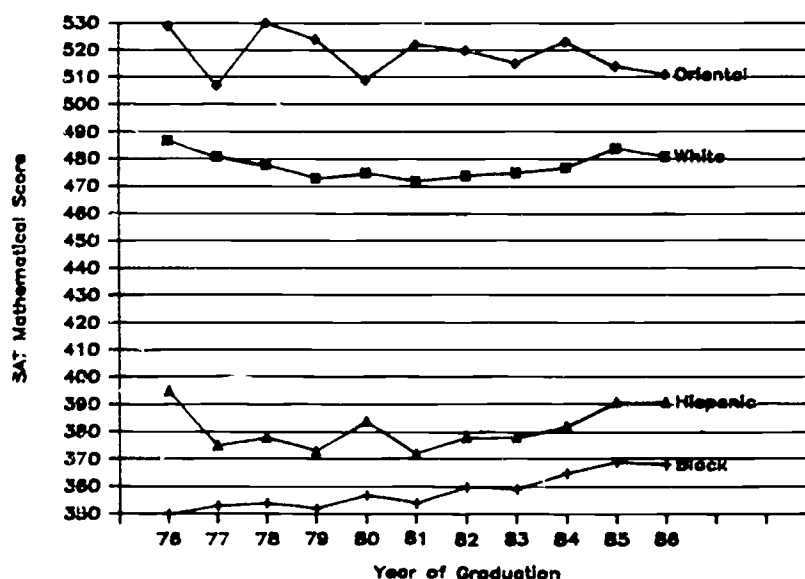


Figure 4  
Scholastic Aptitude Test  
Mathematical Scores By Ethnic Group



pattern in mathematics is similar. The current deficit of 113 points is better than the 137 point difference that existed in 1975-76, but improvement has been slow since 1980-81.

The average verbal score for Hispanic students is currently 354. Comparisons with prior years must be made cautiously because students now identified as "other Hispanic" seem to have been placed in the Puerto Rican and "other minority" categories in prior years, and the number of Hispanics has nearly doubled in the past year and increased fourfold in the past decade. With those caveats in mind, the average verbal score for Hispanic students is five points less than last year, but 21 points above the 1978-79 low. Their mathematics average of 391 was the same as last year, and 19 points above the 1980-81 low. This is the fourth consecutive year that the average difference between Hispanic and white students on the verbal SAT has narrowed. The difference is now 93 points. In the past decade the verbal gap has ranged from 89 points (1975-76) to 110 points (1978-79). The 90-point gap between Hispanic and white students on the mathematical SAT is the smallest ever observed. The difference has been as high as 106 points (1976-77).

Oriental students have a completely different pattern. Their 1985-86 average verbal score of 411 was the lowest ever recorded and was 23 points below the 1983-84 high. Their mathematical average of 511 is 3 points below last year's level; it has ranged from 507 to 530 since 1975-76. The 36-point difference between Oriental and white students on the verbal SAT was the largest ever observed. This difference was as small as 11 points as recently as 1983-84. Orientals have always had higher mathematical SAT averages than whites, but the difference is narrowing. Orientals currently average 30 points higher than whites. In the past decade the difference has ranged from 26 points (1976-77) to 52 points (1977-78).

Table 6  
Test of Standard Written English

Academic Year	Males		Females		Total	
	CT	Nation	CT	Nation	CT	Nation
1985-86	42.1	41.9	43.6	43.2	42.8	42.6
1984-85	42.6	42.0	44.1	43.1	43.4	42.7
1983-84	42.5	41.9	44.1	43.3	43.3	42.6
1982-83	42.1	41.6	43.7	43.0	43.0	42.3
1981-82	41.8	41.7	43.1	42.8	42.5	42.3
1980-81	41.9	41.5	43.3	42.9	42.6	42.2
1979-80	42.3	41.7	43.7	43.0	43.0	42.4
1978-79	42.3	41.8	44.2	43.2	43.3	42.5
1977-78	42.8	42.0	44.6	43.5	43.7	42.8
1976-77	42.9	42.2	44.5	43.7	43.8	42.9
1975-76	42.9	42.1	44.9	44.0	43.9	43.1
1974-75	43.0	42.2	45.4	44.3	44.2	43.2

Table 6 contains the average score on the Test of Standard Written English for male and female students in Connecticut and in the nation from its inception in 1974-75 to 1985-86. The Connecticut average declined for the first time in the past four years, erasing three years of gains. The Connecticut 1985-86 average of 42.8 (on a scale of 20 to 80) was 0.6 points below last year. With the national average declining only 0.1 points to 42.6, the Connecticut superiority over the nation tied the low mark set in 1981-82. The Connecticut average has been as high as one point above the national average (1974-75). Females have outperformed males on this test, but the difference in the average score has narrowed. In Connecticut this difference was 1.5 points, and in the nation it was 1.3 points in 1985-86. In Connecticut the difference has been as high as 2.4 points (1974-75) and as low as 1.3 points (1981-82).

Table 7 contains a ten-year summary of the scores and percent of students in Connecticut and in the nation taking the six achievement tests selected most frequently by Connecticut students in 1985-86. In Connecticut, 10,071 students (35.6% of SAT takers) took at least one achievement test in 1985-86; last year 35.2% of Connecticut SAT takers took at least one achievement test. Nationwide the figure was 20.8%. English Composition, Mathematics Level 1, American History, Biology, Chemistry, and Mathematics Level 2 are the tests taken most frequently in Connecticut and the nation. In the nation, Mathematics Level 2 ranks third followed by Biology, American History and Chemistry.

For those students taking at least one achievement test, Connecticut seniors scored slightly better than seniors in the nation on the verbal SAT but worse than seniors in the nation on the mathematical SAT. For these Connecticut students, the average verbal SAT of 518 was one point above the national average and equal to last year's state average. The Connecticut mathematical SAT average of 564 was twelve points below the national average and one point above last year's state average for this group. The verbal and mathematical SAT scores of Connecticut students taking at least one achievement test are, respectively, 78 and 90 points above the overall current state averages.

The English Composition Achievement Test was taken by 33.7 percent of Connecticut SAT takers and 19.2 percent of SAT takers in the nation. These Connecticut students and their peers in the nation had an average verbal SAT score of 521. Thus, the two groups are comparable in verbal ability. The Connecticut average on the English Composition Achievement Test declined five points in the past year to 520. This was two points below the national average and two points above the state average over the past ten years.

The difference between the Connecticut and national average on the Mathematics I Achievement Test was consistent with the difference in the mathematical SAT of the students who took this achievement test. In 1985-86 the Connecticut mean score on the Mathematics Achievement Test of 532 was nine points below the national average, while the mathematical SAT score of this Connecticut group was four points below the comparable national average. The Connecticut average was four points below last year's but seven points above the 1979-80 low. In the state, 27.4 percent of the college-bound seniors took this achievement test. Nationwide, 14.9 percent of college-bound students took this achievement test.

**Table 7**  
**Selected Achievement Test Scores**

Academic Year	Connecticut		Nation		Connecticut		Nation	
	Percent Taking	Mean Score	Percent Taking	Mean Score	Percent Taking	Mean Score	Percent Taking	Mean Score
English Composition					Mathematics Level 1			
1985-86	33.7%	520	19.2%	522	27.4%	532	14.9%	541
1984-85	33.2%	525	19.3%	523	27.0%	536	15.2%	540
1983-84	33.0%	518	19.0%	518	27.6%	535	15.2%	542
1982-83	32.4%	518	18.4%	518	27.0%	537	14.8%	543
1981-82	31.4%	521	18.3%	520	25.8%	539	14.7%	545
1980-81	32.2%	511	18.4%	512	25.8%	534	14.7%	539
1979-80	33.2%	517	18.6%	518	26.3%	525	14.7%	536
1978-79	33.2%	512	18.9%	514	26.4%	527	14.7%	537
1977-78	34.9%	514	19.7%	512	27.5%	532	14.8%	541
1976-77	33.8%	511	20.5%	516	25.5%	540	15.3%	547
1975-76	33.5%	536	21.3%	532	24.8%	542	15.8%	546
American History					Biology			
1985-86	7.7%	519	4.4%	528	7.0%	539	4.5%	551
1984-85	7.5%	521	4.4%	525	6.8%	541	4.4%	554
1983-84	7.6%	514	4.5%	521	6.8%	532	4.5%	550
1982-83	7.5%	514	4.5%	516	7.4%	524	4.4%	544
1981-82	8.0%	521	5.6%	511	6.8%	529	4.1%	548
1980-81	7.9%	514	5.5%	508	7.3%	522	4.1%	546
1979-80	8.4%	509	5.6%	501	7.9%	525	4.1%	551
1978-79	9.2%	483	5.8%	480	7.8%	528	4.3%	547
1977-78	9.2%	508	6.1%	496	8.3%	528	4.8%	544
1976-77	9.3%	499	6.4%	492	7.3%	530	4.6%	543
1975-76	8.2%	501	6.4%	493	7.2%	540	4.6%	543
Chemistry					Mathematics Level 2			
1985-86	6.5%	562	3.7%	571	6.3%	652	5.0%	660
1984-85	6.8%	567	3.7%	576	6.2%	651	4.7%	658
1983-84	6.3%	562	3.8%	573	5.2%	660	4.3%	659
1982-83	6.8%	555	3.7%	569	4.7%	654	4.1%	655
1981-82	6.3%	557	3.5%	575	4.5%	654	3.8%	661
1980-81	6.3%	556	3.5%	571	4.9%	651	3.8%	654
1979-80	6.0%	551	3.5%	573	4.9%	649	3.5%	653
1978-79	5.9%	551	3.4%	575	4.7%	655	3.5%	657
1977-78	6.0%	553	3.5%	577	4.3%	664	3.3%	665
1976-77	6.0%	540	3.6%	574	4.5%	658	3.1%	666
1975-76	5.2%	542	3.4%	567	4.5%	663	3.2%	665

The average score of Connecticut students on the American History Achievement Test was below the national average for the fourth year in a row. The Connecticut score of 519 in 1985-86 was 2 points below the ten-year high set last year, but was nine points below the national average. In the past ten years, the percentage of college-bound seniors taking the test has declined slightly, both in Connecticut and in the nation. In 1985-86, 7.7 percent of the state's college-bound seniors took this test, compared to a high of 9.3 percent in 1976-77. Nationwide, 4.4 percent of the college-bound seniors took this test. The combined SAT score (the sum of the verbal and mathematical tests) of the Connecticut students taking the American History Achievement Test was eight points below the comparable national group.

The Connecticut average, 539, on the Biology Achievement Test was down two points from the ten-year state high set last year. However, it was 12 points below the 1985-86 national average. That the Connecticut average on the Biology Achievement Test would be lower than the national average was not unexpected since this group of Connecticut students had a lower combined SAT score than students nationwide (1120 versus 1126) and a greater percentage of Connecticut students took this test compared to students nationwide (7.0% versus 4.5%).

The Connecticut average of 562 on the Chemistry Achievement Test was five points below the ten-year high set last year and was nine points below the national average. In the previous ten year the Connecticut average had ranged from 9 to 34 points below the national average. The Connecticut students who took this achievement test had a combined SAT of 1181, which was one point below the comparable national average. In Connecticut, 6.5 percent of the college-bound seniors took the Chemistry Achievement Test compared to 3.7 percent nationally.

The average Mathematics Level I Achievement Test score in Connecticut rose one point to 652 in the past year and the percentage of students taking the test rose 0.1 percentage point to 6.3 percent. That the Connecticut average is eight points below the national average is explained partially by the five point difference in the mathematical SAT average. Since 1975-76 the Connecticut average on this achievement test has ranged from one point above to eight points below the national average.

## HIGH SCHOOL RECORD

The Student Descriptive Questionnaire section covering students' grade point averages, course work, honor course participation and high school activities was revised significantly in 1985-86. In this transition year from the old to the new form, The College Board was not able to provide Connecticut with these data. An expanded high school section will be available next year.

## COLLEGE PLANS

Because of the revision of the Student Descriptive Questionnaire, data on college plans included questions about degree-level goals and intended areas of study only. Questions asked but not available for analysis included need for special academic or financial assistance, advanced placement plans, housing preferences, part-time employment plans, and planned extracurricular activities.

Table 8 presents the current degree-level goals of male and female Connecticut college-bound seniors and those of one, five and ten years ago. In 1985-86, 6.8 percent of these students planned to obtain either a two-year or associate's degree, 33.7 percent a bachelor's degree, 24.4 percent a master's degree, 12.3 percent a professional degree, and 22.9 percent were undecided. Compared to last year more students were undecided, resulting in a decrease in all other categories except the associate in arts degree. In the past ten years the major shifts have been a 3.1 percentage point drop in the percentage undecided, a 4.7 percentage point increase in the percent citing a bachelor's degree, a 3.4 percentage point increase in the

**Table 8**  
**Degree-Level Goals**

Goal	Sex	Percentage of Students			
		1975-76	1980-81	1984-85	1985-86
Two-Year Training Program	Male	4.0	4.4	3.9	2.8
	Female	7.0	3.9	2.9	2.3
	Total	6.0	4.1	3.4	2.5
Associate in Arts Degree	Male	1.0	1.7	1.9	3.0
	Female	4.0	4.9	4.1	5.4
	Total	3.0	3.4	3.1	4.3
Bachelor's Degree	Male	28.0	32.0	34.3	34.7
	Female	31.0	32.7	35.5	32.8
	Total	29.0	32.4	35.0	33.7
Master's Degree	Male	22.0	26.3	26.9	25.6
	Female	21.0	23.9	25.0	23.3
	Total	21.0	25.0	25.8	24.4
M.D., Ph.D., Other Professional Degree	Male	19.0	14.2	13.8	12.0
	Female	12.0	11.7	13.3	12.5
	Total	15.0	12.9	13.5	12.3
Other or Undecided	Male	26.0	21.4	19.2	21.9
	Female	26.0	22.9	19.2	23.7
	Total	26.0	22.2	19.2	22.9

percentage citing a master's degree as a goal, and a 2.2 percentage point decline in the percentage citing a two-year program or associate's degree. While the percentage with a professional degree as a goal has declined 2.7 percentage points, the composition of that group has changed markedly. For the first time ever, the percentage of females intending to get an M.D., Ph.D., or other professional degree exceeded the percentage of males (12.5 to 12.0). Ten years ago, 19 percent of the males and 12 percent of the females cited this area as their goal. With these changes, the distributions of the responses of male and female students are more alike now than five or ten years ago.

Table 9 presents the percentage of male and female college-bound seniors in Connecticut planning to enter six global areas of study for 1985-86 and for one, five and ten years ago. The arts and humanities area includes architecture, art, the languages, music, philosophy, religion, and theater. The biological sciences category includes agriculture, biology, forestry, nursing, therapy, premedical, and similar areas of concentration. The physical sciences area includes computer science, engineering, mathematics, chemistry, geology, and physics. The social science area includes education, ethnic studies, geography, history, home economics, library science, military science, psychology and similar courses.

Table 9  
Intended Area of Study

	1975-76		1980-81		1984-85		1985-86	
	Male	Female	Male	Female	Male	Female	Male	Female
Arts and Humanities	9.8	14.8	10.1	14.8	9.2	13.0	10.4	13.0
Biological Sciences	21.9	33.8	13.5	23.3	10.3	20.8	10.1	19.7
Business, Commerce and Communications	19.1	13.5	23.6	23.8	27.1	27.2	29.9	29.2
Physical Sciences	22.7	4.9	30.1	8.2	31.6	8.7	25.9	5.8
Computer Science	2.9	1.5	6.4	4.3	8.6	4.2	5.6	2.3
Engineering	13.5	0.9	19.4	1.9	19.7	2.4	17.7	2.0
Mathematics	2.5	1.6	1.3	1.1	1.2	1.3	1.0	0.9
Social Science	17.2	26.7	14.1	23.0	13.8	22.4	13.6	24.2
Education	4.2	12.1	2.4	8.4	1.6	6.4	2.0	8.0
Miscellaneous and Undecided	9.1	6.6	8.7	6.9	8.0	7.9	10.1	8.1

The intended areas of study in college have changed significantly in the past year, highlighted by a large decline in the physical sciences, a continued decline in interest in the biological sciences, a continued increase in interest in business, commerce and communications, and a renewed interest in education. Also evident in the last year was an increase in the percent undecided.

Interest in the physical sciences declined in the past year by 5.7 percentage points for males and 2.9 percentage points for females. This area is now cited by 25.9 percent of males and 5.8 percent of females compared to the 1983-84 peaks of 34.0 and 10.7 percent respectively. Interest in computer science has waned. This area was cited by 5.6 percent of the males and 2.3 percent of the females in 1985-86. At its peak in 1982-83, this area was chosen by 11.6 percent of the males and 7.4 percent of the females. Interest in engineering, which had been increasing, declined in the past year from 19.7 to 17.7 percent for males and 2.4 to 2.0 percent for females.

The biological sciences was the other area which had reduced interest in the past year. Unlike physical sciences, which experienced a period of increased interest in the late 1970s and early 1980s, interest in the biological sciences has been steadily declining. In 1985-86, 10.1 percent of the males and 19.7 percent of the females intended to study this area in college. Ten years ago, the figures were 21.9 and 33.8 percent, respectively.

With the decline in interest in the biological and physical sciences, there has been increased interest in the arts and humanities, business, commerce and communications, and the social sciences. More students than in the past ten years also are undecided about a college major. Student interest in business, commerce and communications continued on the upswing, growing in the past ten years from 19.1 to 29.9 percent for males and from 13.5 to 29.2 percent for females. Male interest in the arts and humanities is at a ten-year high (10.4 percent), while female interest is unchanged from last year (13.0 percent) but below the level of ten years ago. Female interest in the social sciences has been revived with 24.2 percent citing this area compared to a low of 20.8 percent in 1982-83. Male interest in this area remained low, 13.6 percent in 1985-86.

Of particular interest to educators is college-bound seniors' interest in education. In the past year, for the first time since the College Board began reporting these data, both males and females showed an increased interest in education. The percent of males interested increased by 0.4 percentage points to 2.0 percent and the percentage of females increased by 1.6 percentage points to 8.0 percent. However, over the past ten years, the percentage of students planning to study education has decreased sharply. Ten years ago, 4.2 percent of the males and 12.1 percent of the females intended to enter this area.



## STUDENTS INTENDING TO STUDY EDUCATION

The number of Connecticut college-bound seniors intending to major in education is a useful predictor of the supply of new teachers available four years later. In 1985-86, 1,215 students indicated such an intent. This figure underestimates the number of intended education majors because not all those taking the SAT respond to this question. Table 10 presents the number of students intending to study education, adjusted for nonresponses, and their average verbal and mathematical SAT scores since these data first became available in 1977-78. Figure 5 compares these to other areas of study.

Table 10  
Average SAT Scores of Connecticut Students  
Intending to Study Education

Academic Year	Percent of Students	Estimated Number of Students	SAT Verbal	SAT Math
1985-86	5.2	1,485	413	430
1984-85	4.2	1,180	407	421
1983-84	4.4	1,300	401	416
1982-83	4.2	1,290	395	409
1981-82	4.5	1,390	395	408
1980-81	5.7	1,780	396	418
1979-80	6.1	1,870	391	419
1978-79	6.5	2,070	402	422
1977-78	7.1	2,190	403	422

The estimated number of students intending to study education increased sharply in the past year, but still is well below the level of 1977-78. The 1985-86 count of 1,485 was 305 (25.8%) above last year's low, but still below the 2,190 count of 1977-78.

The verbal and mathematical SAT averages of those intending to study education have increased a combined total of 40 points in the past four years. The SAT verbal average of those intending to study education declined from 403 to 395 between 1977-78 and 1981-82, and since then has increased by 18 points to 413. The SAT mathematical average of these seniors declined from 422 in 1977-78 to 408 in 1981-82, and since then has increased by 22 points to 430.



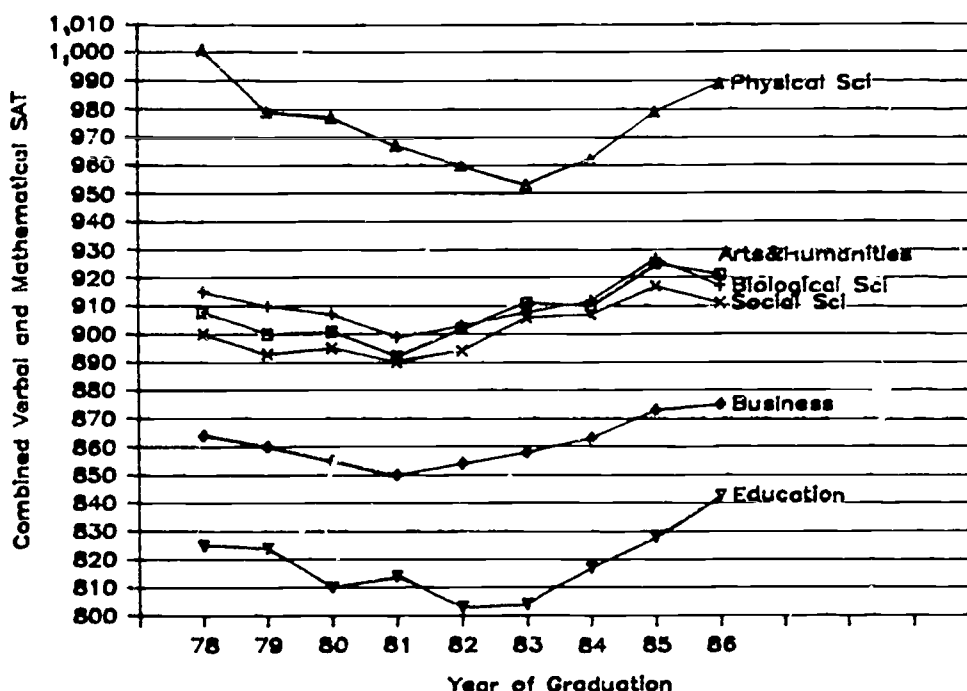


Figure 5  
Combined SAT Scores of Connecticut Students  
by Intended Area of Study

The combined verbal and mathematical SAT score of those intending to study education has increased more than any other intended area of study over the past four years, but still is below the other areas. The combined SAT average in Connecticut declined from 907 in 1977-78 to a low of 893 in 1980-81. Since then it has increased by 21 points to 914. The combined SAT score of those intending to study education fell 22 points between 1977-78 and 1981-82 followed by a 40 point increase to its current level of 843. The combined SAT scores of all areas except the physical sciences are currently above their 1977-78 levels. While the SAT scores of those who eventually become teachers are greater than those reported here, it is clear that the teaching profession is not currently attractive to the best and brightest high school students. Connecticut's education reform program of higher starting and midcareer salaries coupled with more rigorous certification standards, which include comprehensive testing and evaluation programs, was not implemented when these data were recorded. These results may represent the leading edge of one of the intended outcomes of the reform to make the teaching profession more attractive to high school students.

A total of 1,215 college-bound students responded they intend to study education. Slightly over two in eight of these intend to study elementary education, one in eight intends to major in special education, and one in eight intends to major in physical education (see Figure 6). Also, 17.8 percent intend to major in early childhood education and 14.3 percent in a subject area within education (e.g., mathematics education).

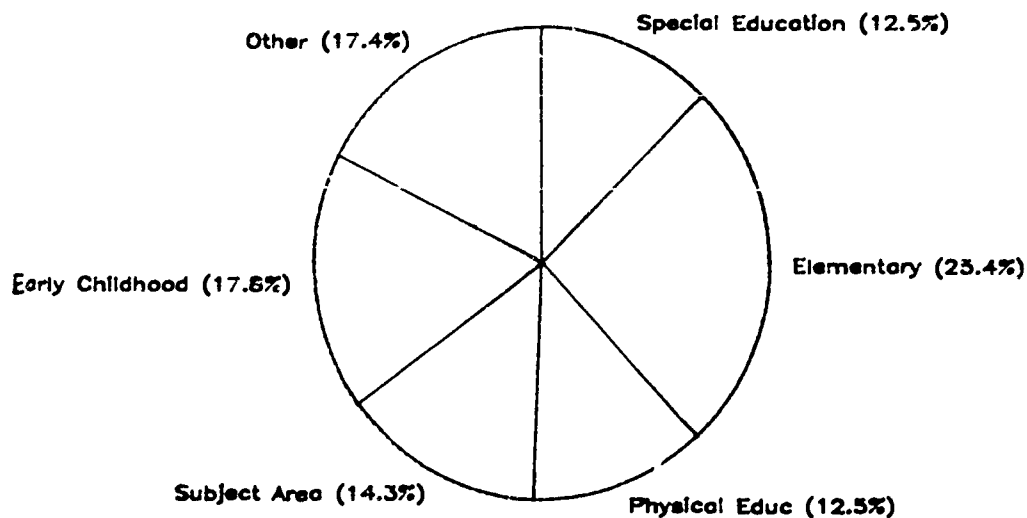


Figure 6  
Intened Major in Education

Students intending to major in education tend to be female and white. This group was 83 percent female and 8.4 percent minority in 1985-86. In September 1985 the teaching staff was 63.4 percent females and 6.0 percent minorities. Only 101 students of the 3,037 minority college-bound students (3.3%) intended to major in education. The percentage of students intending to major in education who are minorities is the smallest of any of the subject area groups (see Figure 7).

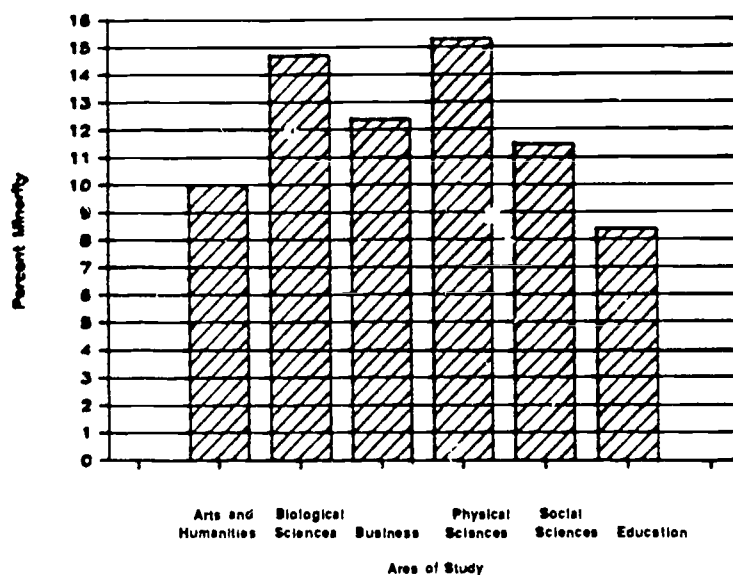


Figure 7  
Percentage of Minority Students  
by Subject Area

The parents of students intending to major in education have less formal education and lower incomes than parents of college-bound students in general. A college degree was held by 38.6 percent of the fathers and 29.3 percent of the mothers of future education majors compared to 45.6 percent and 32.1 percent, respectively, of the parents of all college-bound students. The median family income of prospective education majors was \$31,117 compared to \$37,374 for all college-bound students.

Students intending to major in education reported lower class ranks than college-bound students in general: 27.8 percent of the prospective education majors came from the top fifth of their high school class compared to 34.8 percent of the general college-bound population.

In addition to the 1,215 students who listed education as their intended major, education was the second or third choice of 1,199 students. This group was 69.2 percent female; 11.0 percent minority; is more likely to have first intended majors in the arts and humanities, biological sciences or social sciences than the general college-bound population; and has higher SAT averages (verbal=418, mathematical=444) than education majors.

A total of 2,414 students, 10.4 percent of the students responding to the questions on first, second, or third choice of college major, expressed an interest in education. With the enactment of the Education Enhancement Act of 1986, which raised starting salaries to \$20,000 and made midcareer salaries of \$35,000 to \$40,000 commonplace, these students will not face economic hardships to enter the field of education. They will, however, find the path to the classroom more difficult than in the past. They will be required to pass a test of essential skills in reading, writing, and mathematics and a test of subject-matter competence before initial certification, and undergo a beginning teacher assessment before obtaining their provisional certification.

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